

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please ADD new claims 32 and 33 in accordance with the following:

1. (ORIGINAL) An actuator comprising:
magnets that are arranged in a flat form;
coils that face the magnets;
a moving member that is connected to the coils;
a first holding member that holds the moving member in such a manner that the moving member can slide within a predetermined range; and
a second holding member that holds the first holding member in such a manner that the first holding member can slide within another predetermined range in a direction perpendicular to the sliding direction of the moving member,
the actuator moving the coils against the magnets.
2. (ORIGINAL) An actuator comprising:
coils that are arranged in a flat form;
magnets that face the coils;
a moving member that is connected to the magnets;
a first holding member that holds the moving member in such a manner that the moving member can slide within a predetermined range; and
a second holding member that holds the first holding member in such a manner that the first holding member can slide within another predetermined range in a direction perpendicular to the sliding direction of the moving member,
the actuator moving the magnets against the coils.
3. (ORIGINAL) The actuator as claimed in claim 1, wherein the second holding member includes a pair of shafts that slidably supports the first holding member and are arranged at a distance from each other.

4. (ORIGINAL) The actuator as claimed in claim 3, wherein the first holding member is molded in such a manner as to be in contact only with the lower sides of the pair of shafts.

5. (ORIGINAL) The actuator as claimed in claim 1, wherein the second holding member includes a single shaft that slidably supports the first holding member and has a quadrangular section.

6. (ORIGINAL) The actuator as claimed in claim 1, wherein the first holding member is a molded member defined by bending pressing a plate-like material.

7. (ORIGINAL) The actuator as claimed in claim 1, wherein:
the moving member includes a moving piece that protrudes so that an operator can touch the moving piece; and
the moving piece is slidably engaged with a shaft formed in the first holding member.

8. (ORIGINAL) An actuator comprising:
magnets that are arranged in a flat form;
coils that face the magnets;
a moving member that is connected to the coils;
a first guide member that guides the moving member in such a manner that the moving member can slide within a predetermined range; and
a second guide member that guides the first guide member in such a manner that the first guide member can slide within another predetermined range in a direction perpendicular to the sliding direction of the moving member,
the actuator moving the coils against the magnets.

9. (ORIGINAL) An actuator comprising:
coils that are arranged in a flat form;
magnets that face the coils;
a moving member that is connected to the magnets;
a first guide member that guides the moving member in such a manner that the moving member can slide within a predetermined range; and
a second guide member that guides the first guide member in such a manner that the

first guide member can slide within another predetermined range in a direction perpendicular to the sliding direction of the moving member,

the actuator moving the magnets against the coils.

10. (ORIGINAL) The actuator as claimed in claim 8, wherein:

the moving member has a moving piece that protrudes so that an operator can touch the moving piece; and

the moving piece has engaging tongues that are to be engaged with the first guide member and prevent the moving piece from coming off.

11. (ORIGINAL) The actuator as claimed in claim 8, wherein at least one of the first guide member and the second guide member has protrusions formed on a sliding surface thereof.

12. (ORIGINAL) The actuator as claimed in claim 11, wherein the protrusions are rail-like protrusions that extend in a sliding direction.

13. (ORIGINAL) The actuator as claimed in claim 11, wherein the protrusions are hemispheric protrusions that are scatteringly formed on the sliding surface.

14. (ORIGINAL) The actuator as claimed in claim 8, wherein at least one of the first guide member and the second guide member has concavities on a sliding surface thereof.

15. (ORIGINAL) The actuator as claimed in claim 1, further comprising impact reducing members for reducing impact force caused when the moving member reaches an end.

16. (ORIGINAL) The actuator as claimed in claim 15, wherein the impact reducing members are protrusions formed on at least one of the first holding member and the second holding member.

17. (ORIGINAL) The actuator as claimed in claim 15, wherein the impact reducing members are protrusions formed on at least one of the first guide member and the second guide member.

18. (ORIGINAL) The actuator as claimed in claim 15, wherein the impact reducing members are plate springs or coil springs provided on at least one of the first holding member and the second holding member.

19. (ORIGINAL) The actuator as claimed in claim 15, wherein the impact reducing members are plate springs or coil springs provided on at least one of the first guide member and the second guide member.

20. (ORIGINAL) The actuator as claimed in claim 1, further comprising a board to which the coils are secured,
wherein the board is secured by engaging claws formed on the moving member.

21. (ORIGINAL) The actuator as claimed in claim 1, wherein the magnets are integrally formed with spacers by molding a magnetic material.

22. (ORIGINAL) The actuator as claimed in claim 1 further comprising a resin board to which the coils are secured,
wherein the coils are insert-molded with the resin board and thus secured to the resin board.

23. (ORIGINAL) The actuator as claimed in claim 1, further comprising a board that is integrally molded with the moving member.

24. (ORIGINAL) The actuator as claimed in claim 1, further comprising a resin board to which the coils are secured,
wherein the resin board has ribs for positioning and securing the coils.

25. (ORIGINAL) The actuator as claimed in claim 1, wherein:
the moving member has a moving piece that protrudes so that an operator can touch the moving piece; and
the actuator further comprises a stand-by mechanism that moves the moving piece to a stand-by position when the moving piece is not used.

26. (ORIGINAL) The actuator as claimed in claim 25, wherein the stand-by mechanism includes a stick-like member that presses and holds the moving piece to the stand-by position.

27. (ORIGINAL) The actuator as claimed in claim 1, wherein the coils are coated with a black coating.

28. (ORIGINAL) The actuator as claimed in claim 1, wherein the magnets have surfaces subjected to a blackening process.

29. (ORIGINAL) The actuator as claimed in claim 28, wherein the blackening process includes application of an epoxy resin material that contains a black colorant.

30. (ORIGINAL) The actuator as claimed in claim 1, further comprising magnetoelectric conversion devices that detect a movement of the coils moving against the magnets.

31. (ORIGINAL) The actuator as claimed in claim 1, wherein the magnets are permanent magnets or electromagnets.

32. (NEW) An actuator, comprising:
a set of magnets and a set of coils, one set arranged in a flat form and the other set facing the one set;
a moving member connected to one of the set of magnets and the set of coils;
a first member controlling the moving member to move within a predetermined range;
a second member controlling the first member to move within another predetermined range in a second direction, perpendicular to the first direction; and
the actuator moving one of the set of the coils and the set of magnets relatively to the other of the set of coils and the set of magnets.

33. (NEW) An actuator, comprising:
a set of magnets and a set of coils arranged in mutually facing relationship and movable relatively to each other;

a moving member connected to a selected one of the set of magnets and the set of coils;
a first direction control member controlling the moving member to move within a predetermined range in a first direction;
a second direction control member controlling the first direction control member to move within a second predetermined range in a second direction, perpendicular to the first direction;
and
the actuator moving one of the set of the coils and the set of magnets relatively to the other of the set of coils and the set of magnets.